

INCREASING THE PERSONAL AUTONOMY OF PREADOLESCENTS FROM RURAL AREAS

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Abstract. *The role of sports activities in the training and development of school graduates cannot be disputed. The benefits of this type of activity can be manifested in several aspects: development of motor indicators, maintenance of optimal physical health as well as development of cooperation skills, interpersonal relationships and personality traits, among which personal autonomy is thought to be one of the most important acquisitions. Preadolescence is a stage characterised both by significant changes in the physical and mental plane. The maximum use of sport in school can be achieved by initiating and carrying out extracurricular sports programmes adapted to the needs of students and the specifics of the grade. The research was conducted between 2018 and 2021 in two schools from rural areas in Vrancea County. The study involved 40 participants (30 boys and 10 girls) aged between 12 and 15 years. A comparative analysis of the results obtained by students in the control and experimental groups was performed through the SPSS program using the statistical method for Independent Samples t-Test, Levene's Test and Cohen's d. The results obtained from the statistical analysis support the idea that students participating in the extracurricular sports programme have a higher level of autonomy, are more confident in their future and opportunities and show determination, stability and perseverance in their own beliefs and principles.*

Keywords: *extracurricular sports activities, personality, children, autonomy.*

Introduction

Physical/sports activities develop certain positive attributes of personality, offering an environment conducive to the acquisition of skills, values and social-personal behaviours. Sport is seen as a social institution that covers an intense sociocultural area. Sport and sports activities reflect the interests and problems of society, promoting cooperation, communication, respect, friendship, cohesion, teamwork, tolerance, dedication, competence, competition and non-violence. (Dragnea et al., 2002)

In addition to the efforts made during curricular activities, extracurricular activities provide socialising opportunities for students from rural areas who are marginalised for different reasons (social reasons, suboptimal academic results, shyness), help them to raise self-esteem and improve their attitude towards school (McNeal, 1995; Grigore & Gavrilescu, 2019). The effectiveness of extracurricular programmes in preventing the phenomenon of school dropout is determined by the students' success, behaviour, school commitment, motivation, professional aspirations and more (Drăgoi, 2008).

Within personality traits, the individual's personal autonomy is an ideal of modern culture (Ursin, 2008) and seems to be an important resource for individual adaptation to social issues. Personal autonomy is a personality trait that consists of an individual's self-determination ability, ability to make decisions about their life and ability to fulfil these decisions by assessing

existing options and taking into account their own interests, values and needs without being constrained by external factors. Autonomous individuals do not seek the approval of others but evaluate themselves according to personal standards (Steinberg, 2002).

Autonomy is analysed in the context of the motivational Basic Needs Theory, which helps to understand how well-being develops in social contexts. Based on this theory, autonomy (the feeling of making decisions and controlling one's own actions) is a psychological need of an individual, along with competence (the need to feel effective when interacting with the environment) and relationships (the feeling of connection with and respect for others, such as the sense of belonging to a group) (Ryan & Deci, 2006).

Most authors investigating personal autonomy have conceptualised it as a multidimensional construct. Beyers et al. (2003) talk about attitudinal autonomy, which they define as “the cognitive process of listing one's possibilities and making a choice between different options” (p. 354).

Zimmer-Gembeck and Collins (2006) describe another type of autonomy, namely cognitive autonomy, which consists in the ability to reason independently and make decisions without seeking social validation, but also in a sense of self-confidence. Beyers et al. (2003) state that emotional autonomy “refers to trust in defining goals independent of the wishes of parents and peers” (pp. 354-355), while McBride (1990) says that it is the release from the pressing need to be approved and receive assurances. A definition that encompasses both cognitive and emotional aspects is formulated by Russel and Bakken (2002), who believe that autonomy is the ability to think, feel and make decisions on one's own.

Personal autonomy can be a criterion for mental health. From this perspective, autonomy refers to self-determination, independence and regulation of inner behaviour (Ryff, 1989). The manifestation of personal autonomy differs from the strict pursuit of personal internal impulses, which do not always have a positive influence on personal development (Chaika, 2020).

Some education experts think that, in order to achieve ideals, the “educational system must seek to educate independent and autonomous persons” (Heydari et al., 2012, p. 35). Autonomy is growing during adolescence and includes increased self-regulation of behaviour and emotions, a greater ability to make independent decisions as well as gaining new rights and social responsibilities (Zimmer-Gembeck & Collins, 2006).

In order to operationalize the concept of autonomy, we proposed and used in this study the approach illustrated by the Personal Autonomy Questionnaire, which was designed and calibrated for the Romanian population by the Cognitrom Company. The questionnaire assesses four dimensions of personal autonomy, which are described as follows (Miclea & Bălaj, 2012):

- Cognitive autonomy, consisting of:
 - The ability to reason, form opinions and make decisions independently;
 - The ability to think critically;
 - The desire to enrich and improve one's knowledge (desire for information);
 - The self-assessment ability;
 - The feeling of self-confidence;
 - The belief that one can choose what to do.
- Behavioural autonomy, which involves the self-direction of behaviour and acting according to one's own decisions.

- Emotional autonomy, which refers to the independence of forming and expressing personal feelings.
- Value autonomy, which means establishing one's own set of beliefs and principles resistant to the pressures of others.

The role of physical exercise in developing personal autonomy

Specialists have highlighted the effect of exercise on the personal autonomy of athletes compared to non-athletes. Tüdös et al. (2019) found that adolescent athletes recorded higher values of personal autonomy on all five scales (including overall score) of the Personal Autonomy Questionnaire, compared to non-athletic adolescents.

As regards the role of the coach in nurturing the needs for autonomy, competence and relatedness (Smith et al., 2007), when a coach creates an autonomous sports environment for athletes, they feel more competent, and their social integration is better (Lopez-Walle et al., 2012). The findings of these studies emphasise the importance of autonomy in maintaining a high level of interest in exercise. Moreover, satisfying the need for autonomy provided adult athletes with self-perceived well-being, which sustained their competitive effort throughout an entire season (Reinboth et al., 2004; Reinboth & Duda, 2006). A high level of autonomy allows the individual to engage in constant practice without the tendency to give up.

Methodology

Purpose

The purpose of this research is to analyse the influence of rural middle school students' involvement in extracurricular sports activities on their personal autonomy.

Hypotheses

The general hypothesis is that students' participation in extracurricular sports activities has a significant contribution to the development of their personal autonomy.

The general hypothesis was operationalized in 4 specific hypotheses:

1. Students' participation in extracurricular sports activities contributes to the development of their cognitive autonomy.
2. Students' participation in extracurricular sports activities contributes to the development of their behavioural autonomy.
3. Students' participation in extracurricular sports activities contributes to the development of their emotional autonomy.
4. Students' participation in extracurricular sports activities contributes to the development of their value autonomy.

Participants

The research participants were 40 middle school students (aged between 12 and 15 years), 30 boys and 10 girls (we mention that the number of boys and girls was equal in both the experimental and control groups). At the initial test, they were 12 years old, and at the final test, they had all reached 15 years of age.

Twenty of them, who were students at the Slimnic Middle School, participated in extracurricular sports activities and represented the experimental group. All the parents of students included in the experimental group agreed with their children's participation in extracurricular sports activities. The other 20, who were students at the Tâmboști Middle School, did not participate in extracurricular sports activities but only in the physical education classes provided in the curriculum and represented the control group.

The criterion for inclusion in one of the two groups was their belonging to a classroom in order to facilitate students' participation in a certain number of extracurricular activities (in the case of the experimental group) and foster the social relationship between classmates.

Measure

The Personal Autonomy Assessment Questionnaire was used for data collection. This 36-item questionnaire is part of the Development Assessment Platform: 6/7-18 years old (Miclea & Bălaj, 2012), which was designed and calibrated for the Romanian population by the Cognitrom Company. The questionnaire was administered in the manual version to students in the experimental and control groups, with the support of the school counsellor. Each item is rated between 1 and 5. For directly-rated items, the scores corresponding to the responses are as follows: 1 = "very little", 2 = "little", 3 = "neither too much nor too little", 4 = "much", 5 = "very much". For reverse-rated items, the correspondence between scores and responses is as follows: 5 = "very little", 4 = "little", 3 = "neither too much nor too little", 2 = "much", 1 = "very much". The score of each scale is obtained by summing up the ratings of the component items. The score of the Personal Autonomy Questionnaire is given by the sum of the ratings of all the items, being equal to the sum of the scores obtained for the four scales.

Procedure

The research was conducted in the form of an experiment where the independent variable was represented by the programme of extracurricular motor activities, while the dependent variables were Cognitive autonomy, Behavioural autonomy, Emotional autonomy and Value autonomy.

Before starting the programme of extracurricular sports activities, the questionnaire was initially administered to both the 20 students in the experimental group and the 20 students in the control group. At the end of the three years of the programme, the research participants were tested again using the same questionnaire.

To make a comparative analysis of the initial and final results obtained by both the experimental and control groups for the Autonomy variable, the SPSS program was used.

The extracurricular sports programme

The programme of the experimental group consisted of lessons with specific content for physical education and sport (PES), exercises for harmonious development, movement games, application routes, ball sports games (handball/stickball), races, competitions, trips.

The extracurricular programme was designed according to the following landmarks:

- Type of activity: physical education and sport lessons and extracurricular sport lessons;
- Content: general physical development exercises, elements of sports games (handball), application routes and relays, movement games, races, trips, sports competitions;
- Purpose: acquisitions in terms of individual motor and psychomotor skills, physical development, fitness level, collaboration with others to perform motor tasks, attitude towards exercise, induction of well-being and a sense of belonging to the group;
- Verification: motor skill tests and assessments, application of the psycho-pedagogical file;
- Duration: 3 school years;
- 2018/2019 school year with 34 weeks and 68 PES hours plus 68 hours of extracurricular sports activities;
- 2019/2020 school year with 35 weeks and 70 PES hours, of which 12 weeks online, so 24 hours online, plus 70 hours of extracurricular sports activities;
- 2020/2021 school year with 34 weeks and 68 PES hours, of which 12 weeks online, so 24 hours online, plus 68 hours of extracurricular sports activities;
- Frequency of project activities: twice a week for PES lessons and twice a week for extracurricular sports lessons.

Face-to-face extracurricular activities lasted 60 minutes, and online sports activities lasted 30 minutes. They took place twice a week, in addition to the regular physical education and sport lessons in the core curriculum. The control group participated in the two PES hours provided in the curriculum. Physical education and sport lessons had the same content for both the experimental and control groups, according to the annual planning.

The research aims to identify the impact of extracurricular sports activities on the development of some dimensions of students' personality, more precisely, personal autonomy (self-determination, self-confidence and ability to make decisions about one's own life).

Results

In Table 1, we compare the average initial scores obtained on the Autonomy (A) Assessment Scale for the components: Cognitive autonomy (cognA), Behavioural autonomy (behA), Emotional autonomy (emA) and Value autonomy (valA) by students who participated in extracurricular sports activities (VA) and those who did not take part in this programme (VnA). The statistical significance of the mean difference was analysed using the Independent Samples *t* Test. The results of Student's *t* Test corresponding to a *p* value = 0.05 indicated no significant differences between the average scores of the two categories of participants at the beginning of the extracurricular sports activities.

Table 1. Independent Samples *t* Test results obtained by the two groups

		Levene's Test for Equality of Variances		<i>t</i> Test for Equality of Means					95% Confidence Interval of the Difference	
		F	p	<i>t</i>	df	Sig. (2-tailed)	Mean Diff	Std. Err. Diff	Lower	Upper
cognA	EVA EVnA	0.09	0.16	-0.30	38.00	0.77	-0.30	1.00	-2.33	1.73
behA	EVA EVnA	0.19	0.66	-1.51	38.00	0.14	-1.40	0.93	-3.28	0.48
emA	EVA EVnA	0.70	0.41	-1.75	38.00	0.09	-1.45	0.83	-3.13	0.23
valA	EVA EVnA	0.05	0.82	-1.49	38.00	0.15	-1.05	0.71	-2.48	0.38
SA	EVA EVnA	0.27	0.14	-1.84	38.00	0.07	-2.15	1.17	-4.51	0.21

Note: Cognitive autonomy (cognA), Behavioural autonomy (behA), Emotional autonomy (emA) and Value autonomy (valA) by students who participated in extracurricular sports activities (VA) and those who did not take part in this programme (VnA). SA – score autonomy

Based on these results, the experimental group students started practising different types of sports and physical activities. After three years, they were retested using the same Personal Autonomy Assessment Questionnaire, and the results obtained are presented below.

In Figure 1, we compare the average initial scores obtained on the Cognitive Autonomy (cogA) Assessment Scale by students who participated in extracurricular sports activities and those who did not take part in this programme. The statistical significance of the mean difference was analysed using the Independent Samples *t* Test, and the result obtained was as follows: $t(38) = 2.202$, corresponding to a p value = 0.034 ($p < 0.05$). In statistical terms, there are significant differences between the average scores of the two categories of participants, in the sense that the scores on the Cognitive Autonomy Scale are significantly higher for students who participated in the extracurricular sports programme.

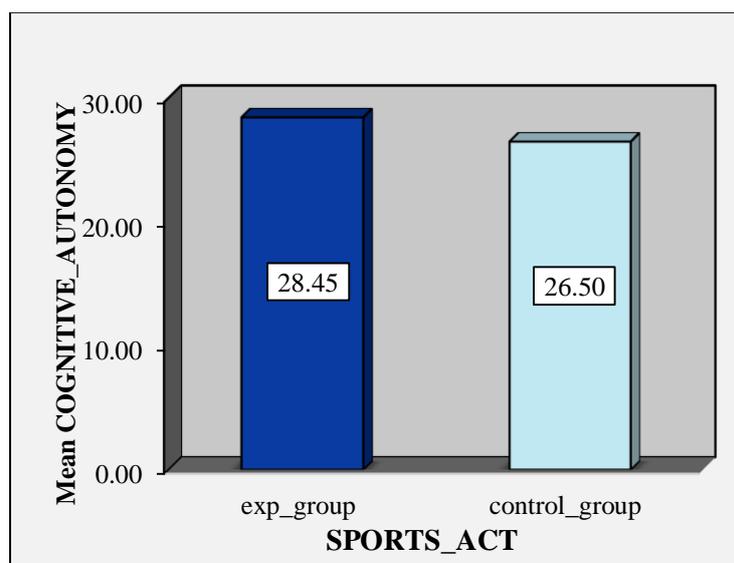


Figure 1. Mean differences on the Cognitive Autonomy Scale (final test)

Statistical results suggest that these students have a better ability to make their own decisions, think critically, form opinions without being influenced by others and self-evaluate and also have confidence in their own abilities and decisions. Specific hypothesis 1 is thus confirmed by the research results.

In Figure 2, we compare the average initial scores obtained on the Behavioural Autonomy (behA) Assessment Scale by students who participated in extracurricular sports activities and those who did not take part in this programme. The statistical significance of the mean difference was analysed using the Independent Samples *t* Test, and the result obtained was as follows: $t(38) = 2.290$, corresponding to a p value = 0.028 ($p < 0.05$). In statistical terms, there are significant differences between the average scores of the two categories of participants, in the sense that the scores on the Behavioural Autonomy Scale are significantly higher for students who participated in the extracurricular sports programme.

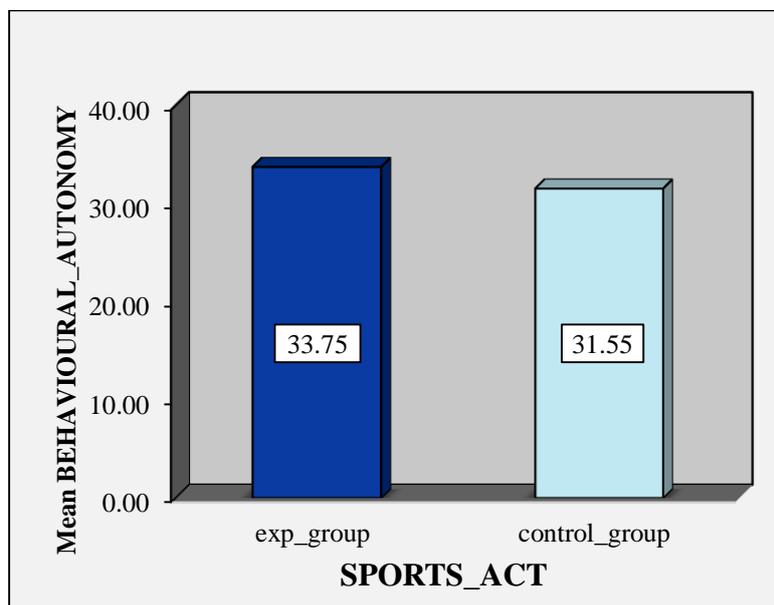


Figure 2. Mean difference on the Behavioural Autonomy Scale (final test)

Statistical results suggest that these students are able to act according to their own decisions, do not give up performing tasks when they encounter difficulties, strive to cope on their own and are not dependent on the constant encouragement and support of others. Specific hypothesis 2 is thus confirmed by the research results.

In Figure 3, we compare the averages of the final scores obtained on the Emotional Autonomy (emA) Assessment Scale by students who participated in extracurricular sports activities and those who did not take part in this programme. The statistical significance of the mean difference was analysed using the Independent Samples *t* Test, and the result obtained was as follows: $t(38) = 2.990$, corresponding to a p value = 0.005 ($p < 0.05$). In statistical terms, there are significant differences between the average scores of the two categories of participants, in the sense that the scores on the Emotional Autonomy Scale are significantly higher for students who participated in the extracurricular sports programme.

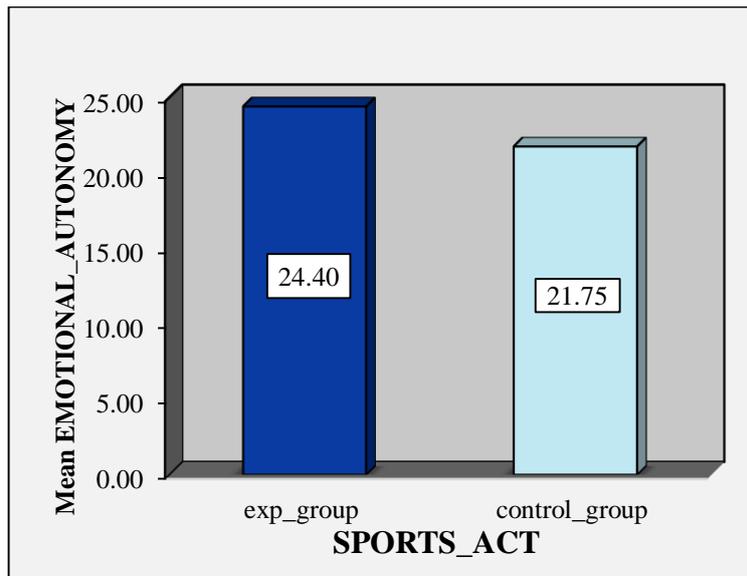


Figure 3. Mean differences on the Emotional Autonomy Scale (final test)

Statistical results suggest that these students have no difficulty expressing their feelings even when they are not shared by others. Specific hypothesis 3 is thus confirmed by the research results.

In Figure 4, we compare the averages of the final scores obtained on the Value Autonomy (valA) Assessment Scale by students who participated in extracurricular sports activities and those who did not take part in this programme. The statistical significance of the mean difference was analysed using the Independent Samples *t* Test, and the result obtained was as follows: $t(38) = 2.746$, corresponding to a *p* value = 0.009 ($p < 0.05$). In statistical terms, there are significant differences between the average scores of the two categories of participants, in the sense that the scores on the Value Autonomy Scale are significantly higher for students who participated in the extracurricular sports programme.

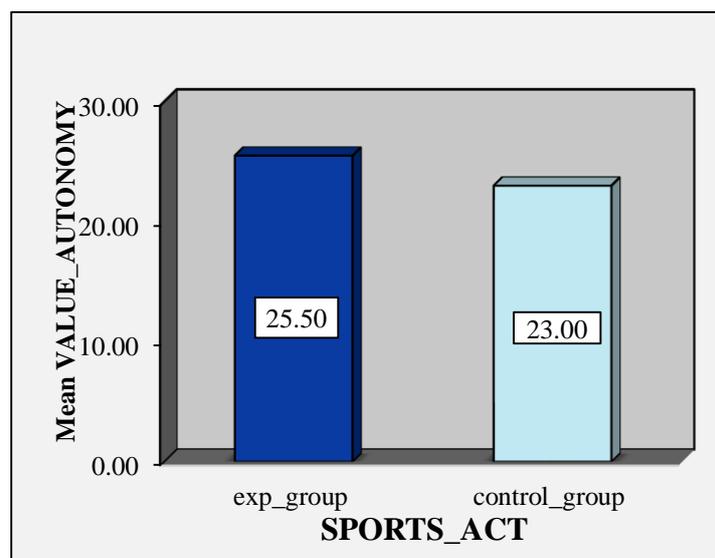


Figure 4. Mean differences on the Value Autonomy Scale (final test)

Statistical results suggest that these students show determination, stability and perseverance in their own beliefs and principles, which they do not give up just because they differ from those of others or because people around them do not agree with them. Specific hypothesis 4 is thus confirmed by the research results.

It was found that the effect size (Cohen’s *d*) is (generally) strong for the components of Personal Autonomy (values between 0.69 and 0.94) (Table 2).

Table 2. Independent Samples *t* Test and Cohen’s *d* – Final results for the experimental and control groups

		Levene’s Test for Equality of Variances		<i>t</i> Test for Equality of Means					95% Confidence Interval of the Difference		Cohen’s <i>d</i>
		F	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
cognA	EVA EVaA	1.19	.28	-2.20	38	.034	-1.95	.885	-3.74	-.15	0.69
behA	EVA EVnA	.24	.62	-2.29	38	.028	-2.20	.961	-4.14	-.25	0.72
emA	EVA EVnA	1.17	.28	-2.99	38	.005	-2.65	.886	-4.44	-.85	0.94
valA	EVA EVnA	.59	.44	-2.74	38	.009	-2.50	.910	-4.34	-.65	0.86
SB	EVA EVnA	.40	.52	-2.71	38	.010	-3.65	1.34	-6.36	-.93	0.85

According to the results, the programme achieved its goal, and the hypotheses were confirmed. The students participating in lessons showed higher autonomy at the end of the sports activity programme.

Discussion and Conclusion

The results obtained, which were statistically processed and interpreted, indicated that all four research hypotheses were confirmed. This allows us to state that the regular practice of individual exercise and team sports as well as participation in sports competitions induce middle school students an increase in personal autonomy. These results confirm the findings of other studies that support the positive influence of exercise on personality traits (Tüdös et al., 2019). They also confirm that a high level of autonomy supports the constant involvement in exercise (Lopez-Walle et al., 2012), which can reduce the tendency to give it up (Reinboth & Duda, 2006).

On the other hand, the fact that students have constantly participated in sports activities during the three years of programme implementation confirms its effect on students’ autonomy, decision-making ability and assumption of personal responsibility, which is in line with the results of the study by Zimmer-Gembeck and Collins (2006).

We highlight the originality of this research by demonstrating that, in the conditions of education in rural areas, which is strongly marked by school dropout, the practice of exercise can be a valid solution for developing personal autonomy of the target group.

The small number of participants is a major limitation of this study and does not allow the generalisation of results. The raw scores (not the *T* scores) were also statistically processed because the participants were 12 years old at the initial test, and the standard reference for the test starts at the age of 15 (however, the existence of equivalent groups of students supports the obtained results). Nevertheless, the research can be a starting point for other studies in the field, which could focus on the relationship between the practice of sports activities by children and the development of other dimensions of their personality through training.

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